

Abstract

An apparatus for treating a particulate material, in particular for mixing, drying, granulating, pelletizing and/or coating the material, has a container which has a process chamber arranged around a longitudinal mid-axis of the container and formed as an annular chamber, and also a container central duct, separated from the process chamber, as a flow duct for process air, which duct opens into the lower region of the process chamber, an upper region of the process chamber being open. In at least one first operating state, the upper open region of the process chamber communicates with the container central duct so as to conduct process air, by the container central duct widening circumferentially towards the upper region of the process chamber and opening towards the process chamber. In a method for treating particulate material, the material is put into the container, and process air is introduced from the container central duct into the lower region of the process chamber and flows upwards in the process chamber in order to move the material in the process chamber. The process air emerges from the process chamber again from the upper region of the latter, the process air, at least in a first treatment phase, after emerging from the upper region of the process chamber, being led at least partly into the container central duct in a continued circulation-type flow and there being led downwards again, where it is introduced into the process chamber once more.